Red Hat

Datasheet

Red Hat Decision Manager 7

Powerful business rules and event management

Features

- Powerful tool sets for business and IT users
- Cloud-native architecture
- Rich, standards-based application programming interfaces (APIs)
- Pluggable repository with comprehensive access controls and life-cycle management
- Embeddable, high-performance rules engine

Benefits

- Automated business decisions
- Accelerated development with business-friendly user interface
- Business rules separated from application code
- Simple configuration and management as embedded APIs or scalable containers using Red Hat OpenShift
- Powerful resource and scheduling optimization
- Shorter development cycles and faster time to market

Red Hat® Decision Manager 7 is a powerful, scalable open source business rules management system that includes business resource optimization and complex event processing (CEP) technology. It helps organizations capture business logic and develop applications that automate business decisions. Decision Manager 7 is fully compatible with the Red Hat Application Services portfolio and with Red Hat OpenShift® for deployment in hybrid cloud environments.

Decision Manager 7 helps organizations incorporate sophisticated decision logic into line-of-business applications with confidence, keeping them ahead of changes in market conditions and regulations. Red Hat Decision Manager 7 separates decision logic from program code and defines it in simple, declarative, business-friendly terms, making it easier and more efficient to implement, manage, audit, and change.

With a choice of modeling tools, project stakeholders can collaborate effectively to build sophisticated business automation solutions. Now incorporating technology from the Kogito open source project, Decision Manager can deploy decision logic as compact and highly efficient microservices on Red Hat OpenShift, suitable for serverless use cases and with event-driven architectures.

With Decision Manager, organizations benefit from improved business agility, consistent and efficient decision execution, shorter development cycles, and faster time to market.

Features

Red Hat Decision Manager 7 brings together a powerful, scalable rules engine with extensions for complex event processing (CEP), a business resource optimization engine, easy-to-use authoring tools, and a standards-based repository for rule definitions.

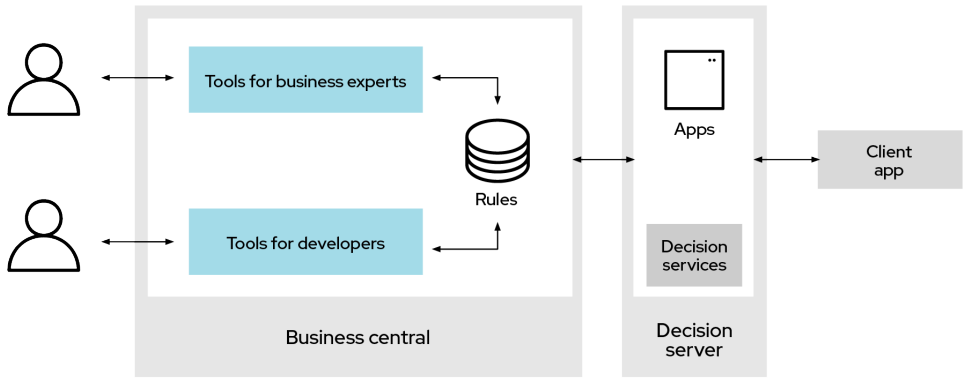

Figure 1. Red Hat Decision Manager 7 features

Decision server

Red Hat Decision Manager 7 provides decision services for client applications. The decision server evaluates business data against relevant rules to arrive at appropriate conclusions—for example, applying adjudication rules to an insurance claim to determine eligibility, or applying regulatory rules to a business transaction to ensure compliance. Red Hat Decision Manager 7 offers a choice of highly efficient inference algorithms, with extensions that provide CEP capabilities and detect real-time business events. The decision server fully supports execution of decision logic expressed in the Object Management Group (OMG) standard Decision Model and Notation (DMN) language. In addition, it helps users combine machine-learned predictive models with DMN models to automate more complex business decisions. Machine-learned models can be imported using the industry-standard Predictive Model Markup Language (PMML), and executed as part of a DMN decision.

The decision server offers flexible deployment options and can be deployed within a Linux® container on Red Hat OpenShift or as a standalone service accessed using REST (REpresentational State Transfer), Java™, or Java Message Service. It also can be embedded directly within a Java application.

Authoring tools

Red Hat Decision Manager 7 includes authoring tools optimized for business experts and application developers:

For business experts, the web-based authoring environment, Business Central, can be hosted on Red Hat OpenShift or on-premise. It provides a powerful suite of easy-to-use features for quick rule creation and management, including DMN modeling, decision tables (Figure 2), domain-specific rule languages, and guided rule editing. Rules can also be authored offline with Microsoft Excel.

For developers, newly introduced technology from the Kogito open source project includes decision modeling plug-ins for the VSCode IDE. Developers can create decision models with DMN or DRL rules, then deploy them as containerized microservices on Red Hat OpenShift.

Pricing loans

#	Description	Application : LoanApplication				Income : IncomeSource	Loan approved	LMI	Rate
		Amount min	Amount max	Period	Deposit max	Income			
1		131000	200000	30	20000	Asset	True	0	2
2		10000	100000	20	2000	Job	True	0	4
3		100001	130000	20	3000	Job	True	10	6

Figure 2. Example decision table for rule editing

Repository

Red Hat Decision Manager 7 includes a repository based on Git, the widely used source code management system. The repository supports comprehensive and user-definable metadata for categorization of stored assets, as well as fine-grained user access controls and version control for rules and process models. Red Hat Decision Manager 7 supports governance workflows to ensure compliance with formal change management policies as rules are modified or moved between development, test, and production repositories.

Resource optimization services

Red Hat Decision Manager 7 includes the Red Hat build of OptaPlanner 8, a tool for constructing solvers for complex optimization problems. It can be used to build applications that optimize common business resource planning use cases, such as vehicle routing, employee rostering, cloud optimization, task assignment, job scheduling, and bin packing. Every organization faces scheduling challenges and must figure out how best to assign a limited set of constrained resources—including employees, assets, time, and money—to provide products or services. OptaPlanner helps users build working solvers with minimal knowledge of optimization techniques and algorithms and deliver more efficient plans to improve service quality and reduce costs.

Supported platforms

For a list of supported platforms on which Red Hat Decision Manager 7 will run, visit redhat.com/decision-manager.

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About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.

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